## WILMERHALE

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February 24, 2006

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## By Electronic Filing

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Comments of Globalstar LLC in IB Docket No. 04-286

Dear Ms. Dortch:

In response to IB Docket No. 04-286 pertaining to the USA Proposals for WRC-07 that were approved at the FCC WRC Advisory Committee meeting of 25 January 2006, Globalstar LLC ("Globalstar") submits the following comments on the draft proposal on WRC-07 Agenda Item 1.6.

WRC-07 Agenda Item 1.6 was created to consider the allocation of spectrum to the Aeronautical Mobile Service (Route)(AM(R)S). One of the bands being considered for this new allocation is the 5091 – 5150 MHz band, which is used for feeder uplinks by the Globalstar Mobile-Satellite Service (MSS) system. In order to give protection from potential interference from these new allocations to the feeder uplinks, Globalstar asserts that further consideration must be given to this issue within the draft proposal for Agenda Item 1.6. To that end, a suggested revision of the draft proposal is attached.

Should there be any questions concerning this matter, please contact David Weinreich at (301) 874-5521, or the undersigned.

Sincerely yours,

Josh Roland

Counsel to Globalstar LLC

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CC: Alexander Roytblat

## GLOBALSTAR LLC PROPOSED REVISIONS - February 24, 2006

## **INFORMAL WORKING GROUP 4 (IWG-4)**

## **Broadcasting and Amateur Issues**

Document WAC/083(25.01.06):

### DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

**Agenda Item 1.6 (Res. 414)**: to consider additional allocations for the aeronautical mobile (R) service in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution 414 (WRC-03) and, to study current satellite frequency allocations, that will support the modernization of civil aviation telecommunication systems, taking into account Resolution 415 (WRC-03);

**Background Information:** This proposal considers additional allocations for the aeronautical mobile (R) service (AM(R)S) in parts of the bands between 108 MHz and 6 GHz, in accordance with Resolution 414 (WRC-03).

Existing AM(R)S bands are nearing saturation in high traffic areas. In addition, new applications and concepts in air traffic management put further pressure on existing AM(R)S bands. Resolution 414 (WRC-03) states that new technologies to support air navigation may not conform to the definition of aeronautical radionavigation in the Radio Regulations. WRC-03 provided a mechanism to implement these new aviation technologies by adding AM(R)S use in the band 108 - 117.975 MHz by footnote 5.197A in accordance with Resolution 413 (WRC-03). One emerging application driving requirements for new AM(R)S spectrum is the integration of command and control for unmanned aircraft (UA) into air traffic services (ATS) airspace. Conversely, AM(R)S spectrum is not appropriate for UA payload data use, such as downlinking information and operational data from the UA.

ITU-R Working Party 8B (WP 8B) and the International Civil Aviation Organization (ICAO) developed a draft operational concept, and technology selection criteria and procedures for new aviation technology. WP 8B and ICAO determined that the new aviation systems require two distinct categories of AM(R)S spectrum. The first category for surface applications could support high data throughput over moderate transmission distances. There is a high degree of reuse of this spectrum. For surface applications, ICAO and WP8B recommended 5 091 - 5 150 MHz as a suitable band. WP 8B is also studying the band 5 091-5 150 MHz under agenda item 1.5 for the purpose of aeronautical mobile telemetry applications. <sup>1</sup>

The second category for bidirectional air to ground applications could support a moderate data throughput over longer propagation distances out to radio line-of-sight. These applications

<sup>&</sup>lt;sup>1</sup> Note that frequencies in the band 108-117.975 MHz are not currently being considered by the U.S. for new aviation technology.

require a number of distinct channels to allow for sector-to-sector assignments. For radio line-of-sight applications, ICAO and WP 8B recommended 960 - 1 024 MHz as a suitable band.

In addition, the 5091 – 5150 MHz band is used by the fixed-satellite service to provide feeder uplinks for non-geostationary mobile-satellite service systems. These feeder uplinks must be protected from interference by new services and applications that are proposed for this band.

# **Proposal:**

# USA/ / 1 MOD

890-1 300 MHz

Allocation to services		
Region 1	Region 2	Region 3
890-942	890-902	890-942
FIXED	FIXED	FIXED
MOBILE except aeronautical mobile 5.317A	MOBILE except aeronautical mobile 5.317A	MOBILE 5.317A BROADCASTING
BROADCASTING 5.322	Radiolocation	Radiolocation
Radiolocation	5.318 5.325	
	902-928	
	FIXED	
	Amateur	
	Mobile except aeronautical mobile 5.325A	
	Radiolocation	
	5.150 5.325 5.326	
	928-942	
	FIXED	
	MOBILE except aeronautical mobile 5.317A	
	Radiolocation	
5.323	5.325	5.327
942-960	942-960	942-960
FIXED	FIXED	FIXED
MOBILE except aeronautical	MOBILE 5.317A	MOBILE 5.317A
mobile 5.317A		BROADCASTING
BROADCASTING 5.322		
5.323		5.320
960-1 164	AERONAUTICAL RADIONAVIGAT	TION 5.328
	ADD 5.328[C]	

**Reasons:** To provide allocations to support evolving AM(R)S applications.

### USA/ / 2 MOD

#### 4 800-5 570 MHz

Allocation to services				
Region 1	Region 2	Region 3		
4 800-4 990	FIXED			
	MOBILE 5.442	MOBILE 5.442		
	Radio astronomy			
	5.149 5.339 5.443			
4 990-5 000	FIXED			
	MOBILE except aeronautical mobile RADIO ASTRONOMY Space research (passive)			
	5.149			
5 000-5 010	AERONAUTICAL RADIONAVIGATION RADIONAVIGATION-SATELLITE (Earth-to-space)			
	5.367			
5 010-5 030	AERONAUTICAL RADIONAVIG	ATION		
	RADIONAVIGATION-SATELLITE	E (space-to-Earth) (space-space)		
	5.328B 5.443B 5.367			
5 030-5 150 AERONAUTICAL RADIONAVIGATION		ATION		
	5.367 5.444 5.444A <b>ADD 5.367[A]</b>			

**Reasons:** To provide allocations to support evolving AM(R)S applications.

### USA/ /3 ADD

**5.328C** The band 960 - 1 024 MHz may also be used by the aeronautical mobile (R) service on a primary basis, limited to systems operating in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **AM(R)S 960** and shall not cause harmful interference to nor claim protection from stations operating in the aeronautical radionavigation service operating in accordance with international aeronautical standards.

**Reasons:** To provide allocations to support evolving AM(R)S applications. Compatibility with regard to existing aeronautical radionavigation service (ARNS) systems will be addressed as a part of standards development for the new AM(R)S system.

#### USA/ /4 ADD

**5.367A** The band 5 091-5 150 MHz may also be used by the aeronautical mobile (R) service on a primary basis, limited to systems operating in accordance with recognized international aeronautical standards. This allocation does not preclude the use of these bands by other services to which these bands are allocated on a co-primary basis and does not establish priority in the Radio Regulations.

**Reasons:** To provide allocations to support evolving AM(R)S applications. Compatibility with regard to existing aeronautical radionavigation service (ARNS) systems will be addressed as a part of standards development for the new AM(R)S system.